

## Trinity Hazardous Waste Management Compliance

**Generator: Trinity College:**

**Address: 300 Summit Street Hartford, Ct**

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### **1.0 Purpose of this plan:**

This management plan is responsible for informing college personnel how to manage all hazardous waste onsite, in accordance with state and federal regulations. This plan is applicable to all buildings on the Trinity College campus.

### **2.0 Scope and Applicability**

This document applies to all hazardous waste that is generated on the Trinity College campus. This includes waste produced by Trinity's facility contractors, ABM. All other outside contractors are responsible for managing and disposing of their own hazardous waste.

### **3.0 Roles, Responsibilities, and Duties**

#### **3.1 EHS Manager (Chemical Hygiene Officer)**

The EHS manager is responsible for overseeing compliance with the hazardous waste regulations across the entire campus. The duties of the EHS Manager are:

- Conducting lab inspections to ensure compliance with the hazardous waste regulations.
- Facilitate and schedule all hazardous waste pick-ups with an outside vendor.
- Complete weekly inspections of Main Accumulation Areas (MAA).
- Complete monthly inspections of Satellite Accumulation Areas (SAA).
- Sign and keep records of all hazardous waste manifests.
- Conduct waste determinations for new waste streams.
- Provide training to Lab Managers and lab personnel on proper hazardous waste management requirements.

#### **3.2 Lab Manager**

Lab Managers are responsible for the coordination of hazardous waste procedures for their respective departments. Their duties include:

- Provide proper waste containers for hazardous waste collection in the laboratories.
- Transport hazardous waste from SAA to MAA for respected department.
- Coordinate with EHS manager when a shipment is required.
- Coordinate with lab personnel to ensure they remain compliant in hazardous waste generation and storage regulations.
- Update hazardous waste tracker as new waste is accumulated.

### **3.3 Facilities**

Facilities is responsible for managing their hazardous waste accumulation. Their duties include:

- Proper labeling of Hazardous Waste.
- Contact EHS Manager for pick-up or transport of waste to MAA.

### **3.4 All Employees**

Every employee of Trinity College is responsible for ensuring hazardous waste is disposed of correctly. If an employee has chemical waste and they are unsure how to proceed, please contact the EHS Manager immediately for proper consultation.

## **4.0 Hazardous Waste Disposal:**

All Trinity personnel that generate hazardous waste are responsible for providing necessary information to the Environmental Health and Safety Manager so they can accurately characterize the hazards. This means Trinity personnel are responsible for knowing the contents and the percentages for the waste they create. The EHS Manager is the only person who can coordinate hazardous waste pick-ups with an outside vendor. If you have a need for shipment, please contact the EHS manager as soon as possible.

All Trinity personnel that will be generating a new waste stream or start generating waste in a container larger than 5 gallons must first contact the EHS manager.

## **5.0 Generator Status:**

As of January 2020, Trinity College is classified as a Small Quantity Generator (SQG) of hazardous waste. As a Small Quantity Generator, Trinity College operate within the following parameters:

- a. The college must not generate more than 2,200 lb. of hazardous waste **OR** more than 2.2 lbs. of acutely hazardous waste in any calendar month.
- b. The college has 180 days to remove hazardous waste stored on site. The 180-day clock begins once the waste container is completely full or no more waste from that process is being generated.

In all Main Accumulation Areas on campus, there is a waste tracking document that is managed by the Chemical Hygiene Officer. This document is a running inventory of items currently on-site, with the accumulation dates recorded. This information is used to ensure the college stays in compliance and waste is shipped out within the 180-day window.

### **6.0 Hazardous Waste Determination Process**

Every container of Hazardous Waste must undergo a waste determination process. This process is completed at the point of generation, or the satellite accumulation area. The EHS Manager will review the contents of each container to determine the associated hazards, before transporting to the MAA. All waste streams are analyzed, and records of these waste determinations are kept in the EHS office and reviewed annually.

If a new waste stream is to be introduced, the EHS Manager must be made aware, prior to any accumulation. The EHS Manager will work with lab personnel to perform a waste determination and equip them with proper labels and waste containers.

### **7.0 Satellite Accumulation Areas:**

A Satellite Accumulation Area (SAA) is a location near the point of generation where waste is temporary stored while the waste accumulates. See a full list of SAA's in Appendix A. All SAA's must be in compliance with the following:

- Waste must be stored in containers, which are compatible with the waste and have a tight-fitting cap or cover.
- Waste containers, which are going to be used as the shipping container must be DOT approved.
- Waste containers must be stored in/on secondary containment which has a capacity of 110% of the largest waste container.
- Waste containers MUST be kept tightly closed at all times, except when adding waste.
- Waste containers must be in a secure location and under the control of the person generating the waste.
- Waste containers must be in good condition, and not leaking, or damaged.
- No more than one container of a particular waste can be kept at one time.
- When a container of waste is full or when that type of waste will no longer be generated, it must be dated immediately, and taken to the waste storage area within 72 hours.
- To minimize the hazard of incompatible chemical reactions, wastes should not be commingled.

### **8.0 Labeling Hazardous Waste:**

All waste containers must be labeled at ALL times. All waste labels must contain the following:

- All constituents (with percentages if available).
- NO CHEMICAL FORMULAS OR ABBREVIATIONS.
- The words “Hazardous Waste”
- A date must be added once the waste container is full or that waste container will no longer be used because that particular process or lab has ended. Once dated that container must leave the SAA in 72 hours.

Hazardous Waste labels are available upon request. Please contact the Chemical Hygiene Officer responsible for your department to replenish your supply.

### **9.0 Main Accumulation Areas:**

Main Accumulation Areas (MAA) are locations where hazardous waste is stored. Waste can be stored in here for up to 180 days and then will be shipped offsite by a licensed hazardous waste transporter.

Trinity College has 3 Main Accumulation Areas. Each MAA has a designated person responsible for the oversight, inspections and transportation of waste from SAA’s to the MAA. The locations and responsible party are:

Clement Chemistry 131- Jim McLaren

Life Sciences Building 031- Erin Mostoller

Buildings and Grounds Shed- Kyle Coughlin

### **10.0 Disposal of Hazardous Waste**

#### **10.1 Disposal of Non-Hazardous Wastes**

Trinity has a strict “No Dumping” policy. All waste is to be handled as hazardous waste until the Environmental Health and Safety Manager, or Chemical Hygiene Officer (CHO) can make a proper waste characterization. All chemical waste will be disposed by the appropriate vendor. If you have any questions, please contact the EHS manager.

## **10.2 Disposal of Empty Containers**

Under Hazardous Waste regulations, chemical containers are considered empty when no more content can be poured out, and an inch or less of content remains. These containers can be recycled or disposed of in the regular trash. This does not apply to containers that have held acutely toxic chemicals, as listed in the RCRA Hazardous Waste List. These chemicals are to be disposed of as hazardous waste. Any containers that also contained reactive or toxic by inhalation material will also be handled as hazardous waste. Contact the Environmental Health and Safety Manager for further instructions.

## **10.3 Disposal of Gas Cylinders**

Gas cylinders can be very costly to dispose of. Please contact the manufacturer to check if they will accept empty cylinders. Any cylinder that cannot be returned to the manufacturer please contact the Environmental Health and Safety Manager. The EHS manager will collect the cylinder and transport it to a Main Accumulation Area. The necessary information including size, contents, percentages, and condition will be collected and sent to the hazardous waste management company. The cylinder will be labeled as Hazardous Waste and must be disposed of within 180 days.

## **10.4 Disposal of Unknowns**

It is extremely difficult and costly to identify the content and hazards of unlabeled materials. If you have unknowns, please contact the Environmental Health and Safety Manager. Please to the best of your ability try to indicate what the waste could be based on location and characteristics.

If the contents cannot be determined the EHS manager will conduct the following tests to determine hazards:

- pH
- Oxidizer
- Water reactivity

The unknown material will be dated and labeled in accordance with the hazards determined through testing. If it comes back as a neutral pH, non-oxidizing, and non-

reactive compound it will be labeled as toxic. The material will be placed in a MAA and the EHS will reach out to Trinity's hazardous waste hauler for next steps and proper disposal instruction.

#### **10.5 Transfer of Hazardous Waste**

Hazardous Waste will be transported and managed by a Chemical Hygiene Officer. Individuals who generate or acquire hazardous waste should place the properly labelled waste container in their SAA and contact the Chemical Hygiene Officer responsible for their area. Chemical Hygiene Officer responsible areas are:

Jim McLaren- Clement Chemistry

Erin Mostoller- Life Sciences Center, Crescent Center for Arts and Neuroscience

Kyle Coughlin- Remainder of Trinity College buildings

Hazardous waste will be transferred in a chemical carrier or via a lab cart that has sides, so a potential leak can be contained. Trinity College does not engage in bulking or consolidating waste streams. Therefore, every container from an SAA will be handled as is. Under no circumstances should hazardous waste be combined.

#### **11.0 Responsibilities of the Chemical Hygiene Officer (CHO) for transferring waste**

- At the SAA the following must occur:
  - Assure the waste is labeled correctly and is in the appropriate closed container;
  - Perform a waste characterization to determine the hazards present with that material;
- Transfer the waste using proper secondary containment directly to the Main Accumulation Area
- In the Main Accumulation Area, the following must occur:
  - Write the date on the label.
  - Place the waste in secondary containment.
  - Ensure all waste in a specific containment reciprocal are compatible.
  - Ensure no waste has been stored for 180 days or more.

## **12.0 Inspection Schedule**

Both Main Accumulation Areas and Satellite Accumulation Areas will be inspected regularly to ensure compliance with state and federal regulations.

### **12.1 Satellite Accumulation Area Inspections**

- Will be performed by the Environmental Health and Safety Manager.
- Will be performed monthly.
- Results will be sent to lab manager and filed in EHS office.
- Lab personnel will be notified of any compliance issues.
- SAA inspections will be kept in the EHS office.

### **12.2 Main Accumulation Areas**

- Will be performed by CHO responsible for the MAA.
- Will be performed weekly.
- Compliance issues will be tracked and reported to EHS Manager.
- Inspection records for the LSC and Clement MAA's are kept in the MAA.
- Inspection records for the B&G MAA are kept in the EHS office.

## **13.0 Training Requirements**

- **RCRA Training**
  - Annually, every July.
  - All Chemical Hygiene Officers must attend.
  - Attendance will be documented, and records will reside in EHS office.
- **Chemical Hygiene Plan/Faculty Training**
  - Will be given annually, every September.
  - Will be given to all Trinity personnel who work in chemical laboratories.
  - Attendance will be documented, and records will reside in EHS office.

## **14.0 Recordkeeping**

The EHS Manager is solely responsible for all records pertaining to hazardous waste. All hazardous waste manifests are stored in the EHS office, and the EHS Manager is the only person authorized to sign for the disposal of hazardous waste. The EHS Manager is responsible for correctly filing and making sure return manifests are acquired within 35 days of the waste leaving site.



**15.0 Program Review Requirements**

This program will be reviewed annually or anytime a change occurs that requires a review/revision.

**16.0 Related Documents**

- Chemical Hygiene Plan
- Bio-Safety Manual
- Universal Waste Management Policy

**17.0 Document Review and Revision Table**

Date	Revision No.	Description	Author/Reviewer

## Appendix A – Satellite Accumulation Inspection List

SAA	Compliant?	Comments
Clement 110		
Clement 112		
Clement 122 (Fume hood)		
Clement 122 (HPLC)		
Clement 126		
Clement 128		
Clement 130		
Clement 202		
Clement 203		
Clement 204		
Clement 207		
Clement 213 (Main lab)		
Clement 213 (back extension)		
Clement 301		
Clement 304		
Clement 309		
Clement 313		
Clement 315		
Clement 317 (Main Lab)		
Clement 317 (back extension)		
Clement 317A		
LSC 337		
LSC 332		
LSC 328		
LSC 327		
LSC 318		
LSC 225		
LSC 232		
LSC 234		
LSC 240		
LSC 243		
LSC 256/248/250		
LSC 249		
LSC 001		
Botany Lab		
McCook 113		

